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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,682	02/12/2002	Jurgen Adams	1900P55320 US	9117
7	590 04/03/2003			
Martin A. Farber			EXAMINER	
Suite 473 866 United Nations Plaza			DONG, DALEI	
New York, NY 10017			ART UNIT	PAPER NUMBER
			2875	
			DATE MAILED: 04/03/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	Ai .				
	10/074,682	ADAMS ET AL.	M				
Office Action Summary	Examiner	Art Unit	V				
	Dalei Dong	2875					
The MAILING DATE of this communication app Period for Reply	ears on the cover s	sheet with the correspondence addr	ess				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status							
1) Responsive to communication(s) filed on 12 F	ebruary 2002						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th	is action is non-fina	al.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims							
4) Claim(s) 11-28 is/are pending in the applicatio	n.						
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>11-28</u> is/are rejected.							
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers							
9)☐ The specification is objected to by the Examiner	•.						
10)⊠ The drawing(s) filed on <u>12 February 2002</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12)☐ The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a)⊠ All b)□ Some * c)□ None of:							
<ol> <li>Certified copies of the priority documents</li> </ol>	have been receive	ed.					
2. Certified copies of the priority documents have been received in Application No. 10/074,682.							
<ul> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) 🔲 N	terview Summary (PTO-413) Paper No(s). otice of Informal Patent Application (PTO-1 her:					

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 11-18 and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over
   U.S. Patent No. 5,994,840 to Forsdyke in view of U.S. Patent No. 5,705,860 to Ninh.

Regarding to claims 11-18 and 21-26, Forsdyke discloses in Figure 1, a "light source 1 is a fluorescent lamp it includes a suitable ballast" (column 1, line 51-52).

Forsdyke also discloses in Figure 1, "at least a part of the light transmissive envelope and preferably the whole of the light transmissive envelope of the source is provided with a coating 2 comprising electro chromic material. Suitable electrochromic materials include:

Iron (111) hexacyanoferrate

Pheanthro (9, 10-c) thiophene

Polyaniline and its substituted derivative and most transition metal oxides with intercalated small mobile ions such as Li, Na, or K" (column 1, line 53-61).

Forsdyke further discloses in Figure 1, "the material amy be held in an inert most matrix. The light source 1 is connected to themains 3 via a switch 4 in conventional manner. A dimmer control circuit 5 pwoered from the mains provides a variable low

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voltage (e.g. 5-12 volts max) to the coating 2 on the light source 1 for varying the light transmission of the coating" (column 1, line 62-67).

Forsdyke further yet discloses in Figure 2, "the coating 2 comprises for example a layer 20 of the aforesaid electro chromic material sandwiched between layers 21 and 22 of light transmissive electrically conductive material" (column 2, line 8-11).

However, Forsdyke does not disclose a riveted cutting connection. Ninh teaches in Figures 3 and 4, "a preferred arrangement of connectors 28 for penetrating the display unit 10 chassis shown in bubble 100 in FIG. 3 are shown. Bracket 17 is provided to mechanically support the display unit 10 from, for example, the airframe structural members, while allowing display screen 11 to be movably positioned for optimum passenger entertainment. Connectors 28 pierce and make electrical contact with bracket 17 and terminate in circuitboard 18 to provide a low impedance path to ground for stray electrostatic charges which may develop and otherwise would be isolated or insufficiently removed in bracket 17, support 14 and the like. As has been mentioned, it is an important goal of this invention to provide a low impedance ground path for the system" (column 7, line 15-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilize the connector of Ninh for the connection of coating of Forsdyke in order to achieve a secure, reliable and low impedance connection between each layers of components and a easy manufacturing process.

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3. Claims 19 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,994,840 to Forsdyke in view of U.S. Patent No. 5,705,860 to Ninh in further view of U.S. Patent No. 6,067,188 to Zieba.

Regarding to claims 19 and 27, Forsdyke discloses a covering for a display device, the covering being translucent and at least partly covering a front side of the display device, further the covering shields electromagnetic fields and the covering is made of an intrinsically electrically conductive polymeric material.

However, Forsdyke does not disclose a riveted cutting connection and at least one colored layer. Ninh teaches a riverted cutting connection, however, fails to teach at least one colored layer.

Zieba teaches "The use of <u>color</u> filters to compensate for the inherent spectral properties and permit clear and readable <u>color</u> images is well known. In particular, depending on the inherent spectral properties, different PDPs may be enhanced with different <u>colors</u>, i.e., tinges, used as a filter. For example, one manufacturer may desire a device having a purple tinge for <u>color</u> correction while another may desire a blue- or green-tinged device for <u>color</u> correction of their PDP. <u>Color</u> correction can be advantageously incorporated into the device of the present invention. Thus, in a preferred embodiment, the IR absorbing coating constitutes a dye material which is selected to complement the <u>color</u> characteristics of particular PDPs, i.e., to be <u>color</u> correcting, and thus, to enhance the chromaticity of the display" (column 5, line 34-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilize the connector of Ninh for the connection of coating of

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Forsdyke and further add the color filter of Zieba to the coating of Forsdyke in order to achieve a secure, reliable and low impedance connection between each layers of components and to compensate for the inherent spectral properties and permit clear and readable color images.

4. Claims 20 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,994,840 to Forsdyke in view of U.S. Patent No. 5,705,860 to Ninh in further view of U.S. Patent No. 6,323,592 to Takahashi.

Regarding to claims 20 and 28, Forsdyke discloses a covering for a display device, the covering being translucent and at least partly covering a front side of the display device, further the covering shields electromagnetic fields and the covering is made of an intrinsically electrically conductive polymeric material.

However, Forsdyke does not disclose a riveted cutting connection and a high intrinsic conductivity polymer layer. Ninh teaches a riverted cutting connection, however, fails to teach a high intrinsic conductivity polymer layer.

Takahashi teaches in Figure 2, "a conductive layer 9 containing fine particles of Ag is formed first on the outer surface of the panel 1 made of, for example, glass. Then, an insulating covering layer 10 containing SiO.sub.2 as a main component is formed to cover the entire surface of the conductive layer 10, followed by baking the laminate structure consisting of the conductive layer 10 and the covering layer 9. After the baking step, soldering is applied by using an ultrasonic soldering device "Sunbonder", trade name of an ultrasonic soldering machine manufactured by Asahi Glass K.K. Japan, to

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bury the conductive member 8 such that the conductive member 8 is electrically connected at one end to the conductive layer 9 and exposed at the other end to the outside" (column 7, line 1-13).

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Takahashi also teaches in Figure 3, "the conductive member 8 made of, for example, ITO is formed in advance on the surface of the panel 1, e.g., on the outer peripheral portion of the panel 1. Then, the conductive layer 9 is formed in an inner region on the surface of the panel 1 such that the outer peripheral portion of the conductive layer 9 is in contact with a part of the conductive member 8, followed by baking to permit the conductive member 8 to be electrically connected to the conductive layer 9. Further, an insulating covering layer 10 is formed to cover the entire surface of the conductive layer 9 with the conductive member 8 partly exposed to the outside" (column 7, line 14-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilize the connector of Ninh for the connection of coating of Forsdyke and further add the conductive member of Takahashi to the coating of Forsdyke in order to achieve a secure, reliable and low impedance connection between each layers of components and to obtain a high electrical conductivity and excellent in light transmittance and thus a clear image of a high contrast.

## Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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The following prior art are cited to further show the state of the art of composition of a covering for a display device.

- U.S. Patent No. 5,717,282 to Oomen.
- U.S. Patent No. 5,742,119 to Aben.
- U.S. Patent No. 6,002,460 to Yamamoto.
- U.S. Patent No. 6,150,754 to Yoshikawa.
- U.S. Patent No. 6,255,778 to Yoshikawa.
- U.S. Patent No. 6,333,592 to Sasa.
- U.S. Patent No. 6,417,619 to Yasunori.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalei Dong whose telephone number is (703)308-2870. The examiner can normally be reached on 8 A.M. to 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703)305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9318 for regular communications and (703)872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

D.D.

March 26, 2003

Sandra O'Shea

Supervisory Patent Examiner

rechnology Center 2800